

REMARKS

1. Applicant thanks the Examiner for the Examiner's comments, which have
5 greatly assisted Applicant in responding.

2. **Oath/Declaration.**

10 The Examiner stated that the present oath or declaration is defective because: Non-initialed and/or non-dated alterations have been made to the oath or declaration, and that Applicants' residences are altered and are not initialed.

A corrected oath or declaration is being prepared. It is pending reaching inventors, and will be submitted immediately upon correction. Applicant assumes that this is
15 considered a full reply.

3. **35 U.S.C. §102(b).**

20 The Examiner rejected Claims 1-5, 7-31, 33-43, 46-56, 58-60 under 35 U.S.C. §102(b) as being anticipated by Mikurak (U.S. Patent No. 6,606,744).

(a) Claims 1 and 46-48

Claim 1 appears as follows:

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1. (original) A computerized system for augmenting data from a source database with data from a reference database to generate an augmented database that can be used for predictive modeling, comprising:

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a source database comprising structured data;

a reference database having reference data;

a locator component configured to use the structured data to locate reference data in the reference database suitable for association with the source database;

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an analyzer component configured to process the reference data into a set of descriptors and associating the descriptors to the source data to form an augmented database;

a predictive modeling component configured to classify behavior with the augmented database; and
a data mining component configured to conduct searches of data in the augmented database.

The Examiner stated that Mikurak anticipated the independent Claims 1 and 46-48 by the following:

- 5 d) an analyzer component configured to process the reference data into a set of descriptors and associating the descriptors to the source data to form an augmented database [col. 80, line 63 to col. 81, line 62; col. 98, line 54 to col. 99, line 26].

col. 80, line 63 to col. 81 appears as follows (emphasis added):

10 Finally, in a managing step 5208, the network is managed based on the future behavior of the network. Data mining involves the development of tools that analyze large databases to extract useful information from them. As an application of data mining, **customer purchasing patterns may be derived from a large customer transaction database by analyzing its transaction**
15 **records.** Such purchasing habits can provide invaluable marketing information. For example, retailers can create more effective store displays and more effective control inventory than otherwise would be possible if they know consumer purchase patterns. As a further example, catalog companies can conduct more effective mass mailings if they know that, given that a
20 consumer has purchased a first item, the same consumer can be expected, with some degree of probability, to purchase a particular second item within a defined time period after the first purchase.

25 **Classification of the data records** to extract useful information is an essential part of data mining. Of importance to the present invention is the **construction of a classifier, from records of known classes, for use in classifying other records whose classes are unknown.** As generally known in the prior art, a classifier is generated from input data, also called a training set, which consist of multiple records. Each record is identified with a
30 class label. The input data is analyzed to develop an accurate description, or model, for each class of the records. **Based on the class descriptions, the classifier can then classify future records,** referred to as test data, for which the class labels are unknown.

35 As an example, consider the case where a credit card company which has a large database on its card holders and wants to develop a profile for each customer class that will be used for accepting or rejecting future credit applicants. Assuming that the card holders have been divided into two

5 classes, good and bad customers, based on their credit history. The problem can be solved using classification. First, a **training set consisting of customer data with the assigned classes are provided to a classifier as input**. The output from the classifier is a description of each class, i.e., good and bad, which then can be used to process future credit card applicants.

10 Similar applications of classification are also found in other fields such as target marketing, medical diagnosis, treatment effectiveness, and store location search.

15 In data mining applications of classification, very large training sets such as those having several million examples are common. Thus, it is critical in these applications to have a classifier that scales well and can handle training data of this magnitude. As an additional advantage, being able to classify large training data also leads to an improvement in the classification accuracy.

20 Another desirable characteristic for a data mining classifier is its short training time, i.e., the ability to **construct the class descriptions** from the training set quickly. As a result, the methods of the invention are based on a decision-tree classifier. Decision trees are highly developed techniques for partitioning data samples into a set of covering decision rules. They are compact and have the additional advantage that they can be converted into simple classification rules. In addition, they can be easily converted into Structured Query language (SQL) statements used for accessing databases, and achieve
25 comparable or better classification accuracy than other classification methods.

30 Another data mining classifier technique solves the memory constraint problem and simultaneously improve execution time by partitioning the data into subsets that fit in the memory and developing classifiers for the subsets in parallel. The output of the classifiers are then combined using various algorithms to obtain the final classification. This approach reduces running time significantly. Another method classifies data in batches.

35 Applicant disagrees that the above teaches 'process the reference data into a set of descriptors and **associating the descriptors to the source data to form an augmented database**. Mikurak clearly discloses something entirely different: **construction of a classifier, from records of known classes, for use in classifying other records whose classes are unknown**. Nowhere does Mikurak

teach or disclose the processing reference data of the claimed invention. What is the reference data in the above? Clearly, it is not the reference data located by the locator component of Claim 1. What are the set of descriptors from the reference data? How, then, is the source database augmented with the descriptors obtained by processing the reference data? Indeed, Mikurak does not teach all limitations of Claim 1.

col. 98, line 54 to col. 99, line 26 appears as follows (emphasis added):

One embodiment of the present invention provides for comparison shopping by utilizing the customer's profile to prioritize the features of a group of similar, competing products, as shown in operation 5404 of FIG. 54. The competing products may or may not have been manufactured by competing business entities. More detail is provided in FIG. 56. First, in operation 5600, a customer's profile is developed. This profile may be developed from many sources including customer input, customer buying habits, customer income level, customer searching habits, customer profession, customer education level, customer's purpose of the pending sale, customer's shopping habits, etc. Such information may be input directly by the user, captured as a user uses the network, and may be downloaded periodically from a user's system. Next, in operation 5601, a plurality of items for purchase are displayed, from which the customer is allowed to select multiple, similar items, i.e. products or services to compare in operation 5602. Then, after a set of features of each item is determined in operation 5603, operation 5604 creates a hierarchy of the features of the items selected in accordance with the customer's profile. For example, as shown in FIG. 57, a comparison of features based on keywords taken from the customer's profile may be performed in operation 5701. The features would be preassociated with feature keywords in operation 5700. When a keyword input by the user matches a feature keyword, the feature is given priority in operation 5702. Features with feature keywords having multiple matches are given highest priority and ranked according to the number of matches in operation 5703. If no keywords match, the user's words could be analyzed using a thesaurus to find keyword matches, but these would be given lower priority in operation 5704. Then, in operation 5605 of FIG. 56, a comparison table is presented with the features organized in a prioritized manner in accordance with the hierarchy. A particular item may be chosen, and similar competing items would be compared to it. For example, the prices of a

service may be compared to the prices of other similar services. The advantages of selected items could also be highlighted against similar competing and noncompeting items.

- 5 Similarly, Applicant disagrees that the above teaches 'process the reference data into a set of descriptors and associating the descriptors to the source data to form an augmented database. What is the augmented database in the above? How can the result of the above be used as in the next step of the method: 'a predictive modeling component configured to classify behavior with the augmented database'. What
- 10 Mikurak discloses is not augmenting the source database with processed reference data from the reference database.

- Therefore, Mikurak does not teach all limitations of Claim 1. Therefore, Applicant is of the opinion that Claim 1 and the dependent claims are in condition for allowance.
- 15 Similarly, Independent Claim 46 and the dependent claims are deemed to be in condition for allowance.

- Therefore, Applicant respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. §102(b).
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(b) Claim 20

- The Examiner stated that Mikurak anticipated the independent Claim 20 by the following (emphasis added):
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- a merchant analysis builder module configured to condense the references provided by the address locating module into a value description and store the value description in the merchant identifier database – and cited the reference passages hereinbelow.
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Col. 101, lines 9-31 appear as follows:

- Any of the foregoing types of browsers may employed to access various databases via the Internet in order to conduct electronic commerce-related business. Typical database or file-based shopping cart systems require that
- 35 the user be uniquely identified in order to associate particular data stored on the server with a particular user. This requires the user to log-in or create an account, which is then stored in the server. Each subsequent request

5 from the user must reference the unique identifier, either in the uniform resource locator (URL) or as hidden data passed back through a form submission. Either of these approaches require that the account or ID information of the user be stored on the remote server in the network for some definite period of time. Usually, the user must keep track of the account identifier in order that the prior session information can be retrieved.

10 Nowhere does the above teach condensing the reference into a value description and storing the value description in the merchant identifier database.

Col. 224, lines 11-46 appear as follows:

15 Catalog Sales Model—The catalog sales model migrates naturally to the Internet. Shoppers can click on a product to see a larger picture and more detailed information. An intelligent agent can suggest similar items or others matching the tastes of the individual. Special offerings and sales can be generated dynamically for each customer at the time of the visit. Catalogs could even be sent as email attachments once per month, with links back to the main site for more information.

20 Convenience Services—Convenience services, such as grocery shopping and virtual flower shops, are successful on the Internet. Busy consumers can choose a greeting card from a huge online catalog, add a personal message, and have it sent on any day they specify.

25 Digital Goods—Digital goods, such as news, research, or data and graphic media like art and photography, are ideal for eCommerce. Buyers can take immediate delivery at the time of purchase, providing instant gratification and peace of mind. The seller does not receive payment until the goods are received.

30 Large Selection of Goods—Online stores can have "virtual inventories" with a depth that would be impossible or prohibitively expensive to duplicate in the physical world.

35 Product Information (Catalog Services) 9500

5 There are many different styles and metaphors for electronic merchandising. The basic underlying concept is providing product information to the end user. Product information may include product specifications, graphics or video images, digital samples, or even inventory availability. The approach for displaying this information may differ based on a Business-to-Consumer or Business-to-Business implementation. The most common implementation is to use the catalog approach.

10 Again, nowhere in the above does it teach 'to condense the references provided by the address locating module into a value description and store the value description in the merchant identifier database'.

Col. 180, line 50 to col. 181, line 16 appears as follows (emphasis added):

15 As shown in component 5326 of FIG. 53, one embodiment of the present invention is provided for affording a combination of miscellaneous capabilities in a web architecture framework. See FIG. 82. Steps included are providing **locator capabilities and streaming data over the network framework** in operation 8200. Further, searching capabilities are provided over the network
20 framework in addition to logging events and passive profiling. In operation 8202, **streaming video and/or audio data is transmitted over the network framework**. Various events may be logged over the network framework. Note operation 8204. User profile information is passively managed over the network framework in operation 8206.

25 **LOCATOR CAPABILITIES—CHANNEL PARTNERS, ED. CENTERS**

Provides proximity-based mapping

30 Enables control of search parameters

Creates interactive maps

Provides multi-criteria proximity search

35 Enables dynamic map navigation

Permits customizable page design

Displays table of query results

Allows user to print maps by one click

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Mapping functions may be provided by the present invention, including proximity-based mapping and interactive mapping. Controls of search parameters would be provided, and could include multi-criteria proximity searching. Dynamic map navigation may be enabled. A table of query results would be displayed. The maps displayed would be printable. Optionally, customizable page design could be permitted, such as allowing a user to personalize mapping based on his or her favorite destinations.

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Again, nowhere does it teach 'to condense the references provided by the address locating module into a value description and store the value description in the merchant identifier database'.

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Therefore, the prior art of reference does not teach all limitations of Claim 20. Accordingly, Claim 20 and the dependent claims are deemed to be in allowable condition. Therefore, Applicant respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. §102(b).

(c) Claims 26, 34 and 40

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For the same rationale as in Claim 1 (the Examiner cited col. 80, line 63 to col. 81 and col. 98, line 54 to col. 99, line 26), Claims 26, 34, and 40, and the respective dependent claims are deemed to be in condition for allowance. Therefore, Applicant respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. §102(b).

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4. **35 U.S.C. §103(a).**

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The rejection is deemed moot in view of the discussion hereinabove. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. §102(b).

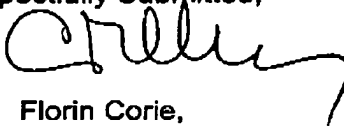
5. **Informality**

Applicant has amended Claim 46 to correct a typographical error.

CONCLUSION

5 Based on the foregoing, Applicant considers the present invention to be distinguished from the art of record. Accordingly, Applicant earnestly solicits the Examiner's withdrawal of the rejections raised in the above referenced Office Action, such that a Notice of Allowance is forwarded to Applicant, and the present application is therefore allowed to issue as a United States patent. The Examiner is invited to call to discuss the response. The Commissioner is hereby authorized to charge any additional fees due or credit any overpayment to Deposit Account No. 10 07-1445.

15 Respectfully Submitted,



Florin Corie,
Reg. No. 46,244

20 Customer No. 22862